

CLAIMS

We claim:

1. A method comprising:
5 receiving at a controller a request to transmit data on a communications link from one of a plurality of embedded devices; and
determining which of the plurality of embedded devices asserted the request.
2. The method of claim 1, wherein the request to transmit data on the link is asserted
10 by activating a link request pin.
3. The method of claim 1, wherein determining which of the plurality of embedded devices asserted the request comprises determining whether the addressed device has asserted a confirmation signal.
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4. The method of claim 3, wherein the controller addresses each of the plurality of embedded devices by a round-robin method.
5. The method of claim 3, wherein the confirmation signal is asserted by activating a
20 wait pin.
6. The method of claim 1, further comprising transferring permission to transmit data on the link from the controller to the requesting embedded device.
- 25 7. The method of claim 1, wherein the communications link is a serial link.
8. The method of claim 1, wherein the plurality of embedded processor devices include at least one baseband processor device.
- 30 9. The method of claim 1, wherein the plurality of embedded devices include a general purpose processor device.

10. The method of claim 1, wherein the plurality of embedded devices include a radio telephone.
11. The method of claim 1, wherein the controller is operable to transmit data on the link when it receives the request to transmit data on the link from the requesting embedded device.
12. The method of claim 11, wherein the controller is operable to determine whether to transfer permission to transmit data on the link to the requesting embedded device.
13. A system, comprising:
a plurality of embedded devices;
a controller to control the plurality of embedded devices;
a multi-point communications link coupling the controller to the plurality of embedded devices, wherein the controller transmits data on the link; and
a link request pin electrically coupling the plurality of embedded devices, each of the plurality of embedded devices operable to request permission to transmit data on the link by activating the link request pin.
14. The system of claim 13, wherein the controller is operable to determine which of the plurality of devices is requesting permission to transmit data on the link.
15. The system of claim 13, wherein each embedded device comprises a confirmation pin to confirm a request to transmit data on the link.
16. The system of claim 15, wherein the controller is operable to address a device and determine whether the addressed device has asserted a confirmation pin.
17. The system of claim 16, wherein the controller addresses each of the plurality of embedded devices by a round-robin method.

18. The system of claim 13, wherein the controller is further operable to transfer permission to transmit data on the link to the requesting embedded device.
19. The system of claim 13, wherein the multi-point communications link is a serial
5 link.
20. The system of claim 13, wherein the plurality of embedded processor devices include at least one baseband processor device.
- 10 21. The system of claim 13, wherein the plurality of embedded devices include a general purpose processor device.
22. The system of claim 13, wherein the embedded devices comprise a radio telephone.
- 15 23. The system of claim 13, wherein the controller is operable to transmit data on the link when it receives the request to transmit data on the link from a requesting embedded device.
24. The system of claim 23, wherein the controller is operable to determine whether to
20 transfer permission to transmit data on the link to a requesting embedded device.
25. A method, comprising:
receiving a link request signal for controlling a multi-point communications link at a controller from one of a plurality of embedded devices;
25 performing an arbitration to determine the requesting embedded device; and
when the requesting embedded device is addressed, receiving a confirmation signal at the controller from the requesting embedded device.
26. The method of claim 25, further comprising transferring the link to the requesting
30 embedded device.

27. The method of claim 25, wherein the arbitration comprises addressing each of the plurality of embedded devices by a round-robin method.